4°C)

--13. (New) An electron-emitting device comprising:

first and second electrodes arranged on a surface of a substrate; and first and second carbon films,

wherein a first end of said first carbon film is electrically connected to said first electrode, a first end of said second carbon film as electrically connected to said second electrode, a second end of said first carbon film and a second end of said second carbon film are disposed in opposition to each other across a gap, the second end of said first carbon film is more distant from said surface of said substrate than the second end of said second carbon film, and an electron emission is achieved at a state where a potential at said first electrode is higher than a potential at said second electrode.

14. (New) An electron-emitting device comprising:

first and second electrodes arranged on a surface of a substrate; and first and second carbon films, wherein

said first carbon film is electrically connected to said first electrode, said second carbon film is electrically connected to said second electrode, said first carbon film and said second carbon film are disposed in opposition to each other across a gap, an end of said first carbon film is more distant from said surface of said substrate than an end of said second carbon film, and an electron emission is achieved at a state where a potential at said first electrode is higher than a potential at said second electrode.